

Work Order # \_\_\_\_\_

Job # \_\_\_\_\_ Activity # \_\_\_\_\_

out this section.

☐ Standing Work Permit

ct pe SHER Date: 4/19/03 Ext. 3454 Dept/Div/Group: PO/CA  
(if different from requester):  
inator THOMAS SHER Start Date 4/16/03 Est. End Date 4/27/03  
Work: INSTALL CHEAPKOU COUNTRY IN PHENIX IL  
- SEE APPENDIX. REMOVE AFTER USE.

18 Room IR Equipment 12 TON Service Provider \_\_\_\_\_

uester/Designee, Service Provider, and ES&H (as necessary) fill out this section or attach analysis.

## ALYSIS

Concerns ☒ None ☐ Activation ☐ Airborne ☐ Contamination ☐ Radiation ☐ Other \_\_\_\_\_  
nuclear materials involved, notify Isotope Special Materials Group ☐ Fissionable materials involved, notify Laboratory Criticality Officer

Concerns ☐ None ☐ Ergonomics ☐ Transport of Haz/Rad Material  
Jing/Removing ☐ Confined Space\* ☐ Explosives ☐ Lead\* ☐ Penetrating Fire Walls  
alls or Roofs ☐ Corrosive ☒ Flammable ☐ Magnetic Field\* ☐ Pressurized Systems  
asbestos\* ☐ Cryogenic ☐ Fumes/Mist/Dust\* ☐ Material Handling ☐ Rigging/Critical Lift  
Beryllium\* ☐ Electrical ☐ Heat/Cold Stress ☐ Noise\* ☐ Toxic Materials\*  
Biohazard\* ☒ Elevated Work\* ☐ Hydraulic ☐ Non-ionizing Radiation\* ☐ Vacuum  
Chemicals\* ☐ Excavation ☐ Lasers\* ☐ Oxygen Deficiency\* ☐ Other \_\_\_\_\_

\*Does this work require medical clearance or surveillance from the Occupational Medicine Clinic? ☐ Yes ☒ No

## Environmental Concerns

☐ Atmospheric Discharges (rad/non-rad) ☒ None ☐ Work impacts Environmental Permit No. \_\_\_\_\_  
☐ Chemical or Rad Material Storage or Use ☐ Land Use ☐ Soil activation/contamination ☐ Waste-Mixed  
☐ Cesspools (UIC) ☐ Liquid Discharges ☐ Waste-Clean ☐ Waste-Radioactive  
☐ High water/power consumption ☐ Oil/PCB Management ☐ Waste-Hazardous ☐ Waste-Regulated Medical  
Waste disposition by: \_\_\_\_\_ ☐ Spill potential ☐ Waste-Industrial ☐ Underground Duct/Piping  
☐ Other \_\_\_\_\_

Pollution Prevention (P2) / Waste Minimization Opportunity: ☒ None ☐ Yes

## FACILITY CONCERNS

☒ None ☐ Access/Egress ☐ Electrical Noise ☐ Potential to Cause a False Alarm ☐ Vibrations  
Limitations ☐ Impacts Facility Use Agreement ☐ Temperature Change ☐ Other \_\_\_\_\_  
☐ Configuration Control ☐ Maintenance Work on Ventilation Systems ☐ Utility Interruptions

## WORK CONTROLS

### Work Practices

☒ None ☐ Exhaust Ventilation ☐ Lockout/Tagout ☐ Spill Containment ☐ Other \_\_\_\_\_  
☐ Back-up Person/Watch ☐ HP Coverage ☐ Posting/Warning Signs ☐ Time Limitation  
☐ Barricades ☐ IH Survey ☐ Scaffolding-requires inspection ☐ Warning Alarm (i.e. "high level")

### Protective Equipment

☒ None ☐ Ear Plugs ☐ Gloves ☐ Lab Coat ☐ Safety Glasses  
☐ Coveralls ☐ Ear Muffs ☐ Goggles ☐ Respirator ☐ Safety Harness  
☐ Disposable Clothing ☐ Face Shield ☐ Hard Hat ☐ Shoe Covers ☐ Safety Shoes ☐ Other \_\_\_\_\_

### Permits Required

Permits must be valid when job is scheduled.  
☒ None ☐ Cutting/Welding ☐ Impair Fire Protection Systems  
☐ Concrete/Masonry Penetration ☐ Digging/Core Drilling ☐ Rad Work Permit-RWP No. \_\_\_\_\_  
☐ Confined Space Entry ☐ Electrical Working Hot ☐ Other \_\_\_\_\_

### Dosimetry/Monitoring

☒ None ☐ Heat Stress Monitor ☐ Real Time Monitor ☐ TLD  
☐ Air Effluent ☐ Noise Survey/Dosimeter ☐ Self-reading Pencil Dosimeter ☐ Waste Characterization  
☐ Ground Water ☐ O<sub>2</sub>/Combustible Gas ☐ Self-reading Digital Dosimeter ☐ Other \_\_\_\_\_  
☐ Liquid Effluent ☐ Passive Vapor Monitor ☐ Sorbent Tube/Filter Pump

### Training Requirements (List below specific training requirements)

Based on analysis above, the Walkdown Team determines the risk, complexity, and coordination ratings below.

ES&H Risk Level: ☐ Low ☒ Moderate ☐ High  
Complexity Level: ☐ Low ☒ Moderate ☐ High  
Work Coordination: ☐ Low ☒ Moderate ☐ High

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If using the permit when all hazard ratings are low, only the following need to sign:

WCC \_\_\_\_\_ DATE \_\_\_\_\_  
Service Provider \_\_\_\_\_ DATE \_\_\_\_\_  
Authorization to start \_\_\_\_\_  
Departmental Sup/WCC/Designee \_\_\_\_\_ DATE \_\_\_\_\_

No need to use the back side of form.

### 3. Both work requester and service provider coordinate on work plan (use attachments for detailed plans)

Work Plan (procedures, timing, equipment, and personnel availability need to be addressed)

- SEE ATTACHMENT -

IF Be Co COPIES to be given J. Scott for disposal

Special Working Conditions Required:

Operational Limits Imposed:

Post Work Testing Required: NO

Job Safety Analysis Required: ☐ Yes ☒ No

Walkdown Required: ☐ Yes ☒ No

**Reviewed by:** Primary Reviewer will determine the size of the review team and the other signatures required based on hazards and job complexity. Primary Reviewer signature means that the hazards and risks that could impact ES&H have been identified and will be controlled according to BNL requirements.

Title	Name (print)	Signature	Life #	Date
Primary Reviewer	Arthur J. Jones	[Signature]	18661	4/16/03
ES&H Professional	P. C. C. C. C.	[Signature]	21868	4/16/03
Other	C. E. E. E.	[Signature]	15245	4/16/03
Other				
Work Control Coordinator	Thomas K. Suen	[Signature]	20208	4/16/03
Service Provider				

Review done: ☒ in series ☐ team

### 4. Job site personnel fills out this section.

Note: Signature indicates personnel performing work have read and understand the hazards and permit requirements (including attached permits).

Job Supervisor	Life #	Contractor Supervisor	Life #
John K. Jones	15267	Tim K. Jones	18443
Ken Jones	20135		
Red Paintings	P6221		
Chickens	X-5254		

Workers are encouraged to provide feedback on ES&H concerns or on ideas for improved job work flow. Use feedback form or space below.

### 5. Departmental Job Supervisor, Work Control Coordinator/Designee

Conditions are appropriate to start work: (Permit has been reviewed, work controls are in place and site is ready for job.)

Name: T. Shea Signature: Thomas K. Suen Life # 20208 Date: 4/16/03

### 6. Departmental Job Supervisor, Work Requester/Designee determines if Post Job Review is required. ☒ No ☐ Yes

**Post Job Review (Fill in names of reviewers)**

Name	Signature	Life #	Date

### 7. Worker provides feedback.

Worker Feedback (use an attached sheet if necessary)

### 8. Work Control Coordinator (authorizing dept.) checks quality of completed permit and ensures the work site is left in an acceptable condition.

**Closeout**  
 Name: Thomas Suen Signature: Thomas K. Suen Life # 20208 Date: 4/17/03  
 Comments: WORK COMPLETED ACCORDING TO PLAN

Attachment to Work Permit No. SS2003-027 Dated 4/16/03

#### Description of work.

This plan describes limitations on the use of the 12 ton building crane in the IR to install and remove a Cherenkov counter in the PHENIX IR in building 1008.

#### Work Plan

- LOTO the South Muon Magnet at the feed to the power supply.
- Use the 12 ton crane to hoist a 300 pound Cherenkov counter into position on top of the steel collar on the rear face of the South Muon Magnet. Because of the existence of flammable gas in several detectors on the East and West carriages, hook travel is restricted to the clear floor area East and South of the East carriage and South of the South Muon magnet for this operation.
- Access to bolt the counter in place and run cables is from the existing platform under the collar.